## Integrating Ecosystem Services into Development Planning (IES)

**A training for impact assessment practitioners given by the GIZ at the IAIA’17 in Montreal, Canada**

### Section 1 – Basic Information

<table>
<thead>
<tr>
<th>Title</th>
<th>Integrating Ecosystem Services into Development Planning (IES) – A training for Impact Assessment Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>Basic understanding of ecosystem functions and ecological concepts</td>
</tr>
<tr>
<td>Language of delivery</td>
<td>English</td>
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<tr>
<td>Duration</td>
<td>2 days</td>
</tr>
<tr>
<td>Maximum number of participants</td>
<td>20</td>
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<tr>
<td>Laptop requirements</td>
<td>None</td>
</tr>
</tbody>
</table>

**Name and contact details**

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(IAIA member as of IAIA2016 conference)

**Isabel Renner**  
Sandweg 6c  
60316 Frankfurt, Germany  
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T: +49 176 84081481
Section 2 – Course Description

(a) Short summary of the course (300 words).

Environmental impact assessments (EIA) and strategic environmental assessments (SEA) are increasingly applied in developing countries to aid development planning. Many assessments, though, are still lacking a comprehensive identification and analysis of ecosystem services (ES), despite a growing consensus amongst scientific literature that the benefits of ES to human well-being can hardly be overstated and should be integrated into plans and strategies.

At the same time development financiers like IFC requires ES analysis within project EIAs to qualify for loans. This could become more widespread and with this training we seek to prepare IA practitioners for this situation.

Improving ES assessments in IA by determining impact and dependencies of human activities on ES provides practitioners with arguments to better convey the importance of ecosystems to relevant decision-makers. Moreover, it allows identifying potential unintended negative consequences of an activity that might otherwise be overlooked and thus helps to strengthen the resilience of ecosystems and log-term viability of developments and plans.

In this training we showcase the ‘6-Step approach’, which offers a guide to assess ES in project and plans. Participants will also be introduced to specific instruments and methods via the ValuES Inventory of Methods (www.aboutvalues.net).

The training applies the Harvard Case Methodology. A series of exercises build around a fictitious case study, coupled with input lectures from the trainers, will help participants to understand materials and content. Over the last 4 years the IES-training has been conducted over 80 times in developing countries and in Germany. The course is demanded which can be counted as a measure of satisfaction of participants and further recommendation. Experience in conducting IA and a basic understanding of natural systems and its functions are prerequisites for this intermediate level course.

(b) Target audience.

The training emphasizes the role of ES analysis and valuation in a decision-making context and thus focuses on the integration of ES analysis and valuation in various environmental assessments. It is therefore ideally suited for practitioners of environmental impact assessments consulting for governments and private sector enterprises. The training is also of use for other interested parties that seek to influence development policy in order to reach more sustainability of plans and projects (e.g. political decision-makers, NGOs, development financiers).

(c) Detailed description of the course.

During the last decades, humans have become increasingly aware of its (often negative) effects on nature. This awareness gave rise to the concept of ecosystem stability,
environmental sustainability and ecosystem services (ES). The concept of ecosystem services as used today is still relatively new. After first appearing in scientific articles in the 1980s, it took until the 1990s before the concept was broadly accepted and became used more widely (e.g. de Groot, 1992; Costanza et al., 1997; Daily, 1997).

Nowadays, and especially after the Millennium Ecosystem Assessment (MEA, 2005), the Economics of Ecosystems and Biodiversity Report (TEEB, 2010), and the commitments of the Convention on Biological Diversity (CBD) Strategy Plan 2010-2020, practitioners and policy makers are more frequently confronted with a set of multifaceted challenges when attempting to promote social and economic development in the face of managing natural resources sustainably. Making use of the services that nature provides allows humans to improve their livelihoods and to facilitate scientific and technological advances. However, as the state of ecosystems continues to deteriorate globally due to exploitation and unsustainable management, so does the risk of adverse consequences for humans increase as well. It is for this reason that many advocate a more sustainable use of nature, especially when considering future generations’ welfare. As a result, many decision-makers are seeking advice by commissioning environmental impact assessments in order to obtain information on how development, social well-being and environmental stability can be linked efficiently to ensure sustainable development. This places significant responsibility in the hands of impact assessment practitioners and requires assessments to be carefully conducted in a best possible way.

Environmental impact assessments (EIA) and strategic environmental assessments (SEA) have been more widely applied in developing countries in policy, project and land management decision-making. The notion behind these methods is to assess the state and conditions of an ecosystem, as well as a potential future state under a certain management or development scenario. If applied rigorously these ES assessment methods help to identify key dependencies in an ecosystem and provide information on how human activities are influencing an ecosystem at present, or how current or new activities might change an ecosystem in the future and therefore development paths.

However, a significant proportion of such assessments are currently lacking a comprehensive and extensive identification and analysis of ecosystem services. Many SEA or EIA mention different bundles of ecosystem services (provisioning, regulating, cultural and supporting), but fail to address how land use change affect an ES over time and other ES that are also linked to the ecosystem and ES spatially or temporal. Hence, oftentimes less obvious effects and interdependencies amongst ES and between ES and human well-being are not properly identified and taken into account in decisions being made. For example, some ES such as food or timber provision are easily recognized, but ES such as erosion control or the mitigation of extreme events are often neglected in an assessment due to their complexity and/or little knowledge. The outcome of many EIA or SEA can be compromised as the ES assessment do not properly account for impacts on the benefits of ecosystem services. This can potentially endanger the robustness of the assessment and diminish its effectiveness for successful policy advice.
The focus of this training is the appropriate scoping, identification, analysis and valuation of ES. The IES-training was designed to understand and communicate impact and dependencies of development initiatives on ecosystems and their services, and raise evidence for a political dialogue in which environmental and social arguments of development projects are more wholly considered. The desired outcomes of an assessment that contains a robust ES analysis and valuation are policies that lead to long-term sustainable development.

At the start of the training, participants will be introduced to the “6-Step approach to IES”. This is an elaborate stepwise approach that documents the necessary tasks that practitioners need to perform in order to successfully integrate an ES analysis and valuation into development planning. After that, the training will focus on those steps that are of crucial importance for practitioners. For every step of the process, the training will explain “what to do”, “how to do it” and what “expected outputs” are. A set of guiding questions are highlighted at the beginning of each section and will allow participants to reflect on the learning outcomes of each section. Additionally, an elaborate guide will be available, detailing the purpose of every step and containing information about the entire training.

For the training at IAIA’16, the IES Training is adapted to suit the needs of impact assessment practitioners. The two days are therefore divided into eight sessions, which can be found at the end of this section.

The training is based on the Harvard Case Methodology, which conveys teaching messages mainly through interactive practical work by participants. Hence, participants will take part in a number of exercises. Subject of the exercises is a fictitious country named Bakul, which has been modelled to fit a situation closely based on real life conditions and challenges. A number of environmental and social dimensions and problems exist in the country and the aim of the exercises will be to introduce participants to the problem situation and to have them discuss and devise solutions to different exercise tasks. Each exercise in the training follows crucial elements, which are:

- An introduction, given by the trainer, providing the necessary theoretical background and an introduction to the case work and the respective exercise(s).

- The case work, giving participants the opportunity to work through the different aspects linked to IES in a systematic manner. Participants assume the roles of ‘case work experts’ or involved stakeholders in charge of the specific exercise’s task.

- The presentation of results, giving participants the opportunity to present their work to the plenary. Trainers offer alternatives and corrections when necessary.

- The reflection, enabling participants to reassume their own real-life position and allowing them to reflect on their experiences and link them to their own work.

The objective of the training is to recognize the correlation between ecosystem services and development as a crucial factor for development planning. Managing ecosystems to
sustain the flow of ecosystem services can provide immediate economic benefits and strengthen the resilience of those systems, especially also in the face of climate change. Secondary objectives include the addressing of challenges related to the “6-Step approach” and the familiarization of participants with related tools, methods and mechanisms.

This training is part of the efforts of project “ValuES - Methods for integrating ecosystem services into policy, planning, and practice”. This global project supports practitioners, advisors and decision makers in ministries and other organizations in the integration of ecosystem services into decision-making and planning processes. The project promotes the use of ES assessments as tools to inform policy dialogues. This training at IAIA would be one of the project’s efforts to link to the impact assessment community we perceive as crucial for furthering sustainable development and policies.
## Provisional Agenda of the IES-Training for Impact Assessment Practitioners at the IAIA’16 in Naoga, Japan (subject to small changes)

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduction to the Training</td>
<td>• Scenario Development</td>
</tr>
<tr>
<td>• Ecosystem Services Concept</td>
<td>• Institutional and Cultural Context</td>
</tr>
<tr>
<td>• Overview of the Six-Step Approach</td>
<td>• Methods and Instruments to Assess and Valuate Ecosystem Services</td>
</tr>
<tr>
<td>• Introduction to the Case Study</td>
<td>• Application of the Ecosystem Services Approach in Impact Assessments</td>
</tr>
<tr>
<td>• Identifying Ecosystem Services and Stakeholders</td>
<td>• Checking with Reality</td>
</tr>
<tr>
<td>• Prioritizing Ecosystem Services</td>
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</tbody>
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### 9:00. Opening and Introduction
- Introduction of the trainers and participants.
- Overview of course aims and explanation of the course structure.

### 9:30. Ecosystem Services Concept and Overview of Six-Step Approach
- Refresh basic terms and concepts.
- Role of ecosystem services for human well-being.
- Overview of the six-step approach with a short explanation of each step.

### 10:30 – 10:45. Break

### 10:45. Introduction to the Case Study and Identifying ES and Stakeholders
- Getting to know the country of Bakul and its infrastructure development plans and policy strategies.
- Input lecture on identifying key ES for impact assessments.
- Identification of relevant stakeholders (ES impacts and dependencies)
- Exercise(s) + discussion and reflection.

### 13:00 – 14:00. Lunch

### 14:00. Prioritizing Ecosystem Services
- Input lecture on prioritization of ES for impact assessments.
- Exercise(s).

### 15:15 – 15:30. Break

### 15:30. Prioritizing Ecosystem Services (cont.)
- Discussion and reflection on exercise.
- Theory and instruments for how to select ES in different contexts.
- Wrap up of Day 1 – Summary of what has been learned and putting it into the context so far.

### 17:00. End of Day 1.

### 9:00. Scenario Development
- Identifying development trends.
- Establish common understanding of present and future state of ES conditions.
- Discussion on stakeholder involvement (methods and necessary scope)

### 10:30 – 10:45. Break

### 10:45. Institutional and cultural context.
- Appraising the institutional and cultural framework.
- How can this context be integrated and considered in an impact assessment.
- Exercise(s) + discussion and reflection.

### 12:15. Methods and instruments to assess and valuate ES.
- Introduction to the ValuES Method Inventory Database.

### 13:00 – 14:00. Lunch

### 14:00. Application in IA
- Sharing of experience.
- Presentation of case studies where the ES approach has been applied successfully.

### 15:15 – 15:30. Break

### 15:30. Checking with Reality
- Discussion about hindering and challenging factors when including the ES approach in EIA and SEA.
- Potential solutions to overcome these challenges.
- Recap of day 2 and the entire training. Lessons learnt.

### 17:00. End of Day 2.
(d) **Description of the materials participants will receive.**

Participants will receive materials including handouts for each individual exercise and accompanying information for the entire training (in hardcopy for exercises and on USB including background documents, powerpoint presentations, case and exercise documents). An elaborate guide for the entire IES training is also available and will be provided.

(e) **Description of technology requirements.**

Materials required include projector, flipcharts (4), pin boards (at least 4) and moderation cards.

(f) **Provisions for pre-conference and post-conference communication with participants.**

There will be e-mail communication with confirmed trainees ahead of the course to highlight issues and suggest some pre-conference readings. Following the conference trainees will be added to the ValuES mailing list.

**Section 3 – Qualification of the Trainer(s)**

(a) **Curriculum Vitae of each trainer**

(please also see attached CVs)

Ulrike Tröger is a sustainable development and natural resource management specialist. As part of the ValuES project team she developed trainings focusing on the ecosystem services approach and how to make it useful and impactful in decision-making processes. As part of the ValuES Team Ulrike has implemented and attended 10 trainings which received high scores by participants.

Isabel Renner is a rural development expert. Having worked in the fields of management of natural resources, biodiversity and ecosystem services, she facilitated more than 40 trainings in Latin America, Asia and Africa. As a core team member she developed the IES-Training and rolled out its successful implementation.

(b) **History of the course**

Ecosystem services are central to human survival, and to social and economic development. Individuals, households, businesses and industries all rely on ecosystem services for their wellbeing and growth – and stand to incur significant costs and losses if they are degraded. These harmful effects tend to be borne disproportionately by the poor, who are less able to access or afford alternatives when ecosystem services are lost.

For these reasons, it is of critical importance to ensure that ecosystem services are incorporated into development planning, because they are essential to equitable and sustainable growth and development.
The IES Training was born from that understanding that rose through GIZ’s work in rural development. The goal for this training was to show how benefits and costs associated with ecosystem services’ conservation and degradation have been largely excluded from the economic policies.

The training was designed to reach planners to recognise the links between nature and development, consider the trade-offs associated with development plans, and incorporate ecosystem service-related opportunities and risks into their development strategies.

It advocates a stepwise approach to the integration of ecosystem services into development planning. Since the training was first piloted in 2012 it has been given more than 80 times (as Training and Training of trainers) in developing countries GIZ is working in and in Germany as well as at international meetings similar to IAIA (e.g. ESP).

Section 4 – Commitment of the Trainer(s)

(a) Identify how many times a course has been offered by the trainer(s).

Ulrike Tröger: 8 times
Isabel Renner: >40 times

(b) Training courses where changes in trainer or course structure had to be amended.

Ulrike Tröger and Isabel Renner are committed to deliver the course in Montreal.

In the unlikely event that one of the trainers is not able to attend the Montreal conference, there is a pool of trainers with vast experience that could serve as an adequate replacement.

(c) Level of commitment to give this course.

Aside from unforeseeable circumstances, or a lack of participants, there is no reason for the course to be cancelled. A number of instructors would be available to replace an already assigned instructor in the case of unexpected events, especially with ample preparation time.

While the course can contain up to 19 (+2) participants, it is also perfectly doable with up to 6-9 participants.

(d) Note backup strategy in the event that an instructor must withdraw unexpectedly.

In the unlikely event that one of the instructors finds himself unable to attend the conference, there is a possibility of replacing that instructor. The GIZ team in Germany consists of multiple members, each of whom has given the training multiple times. In all likelihood, one of these team members could step in and replace the previously assigned instructor.
Even if that would prove impossible for any reason, the training has been conducted solitarily before and could be carried out with only one instructor present.

Sufficient handouts and “non-digital” material is also available and could be used in the case of electronic failure, meaning that the training could be conducted without a PowerPoint presentation if need be.

(e) **Statement agreeing to provide free places to students.**

We comply with the stated rules of agreeing to provide free places for students (based on the number of total participants), as the GIZ also recognizes the importance and potential of students. Moreover, the GIZ would welcome the participation of at least one or two students, as it creates a more dynamic environment within the group and promotes a healthy work ethic amongst the participants.
CURRICULUM VITAE  M.SC. ISABEL RENNER

PERSONAL DATA
Surname: Renner
Name: Isabel
Date of birth: 28.11.1976
Place of birth: Hameln
Nationality: German

CORE AREAS OF EXPERTISE
Rural development and management of natural resources, biodiversity and ecosystem services, facilitation and training.

EMPLOYMENT
Since 4/15  Freelance consultant
5/10 – 3/15  Programme Implementing the Biodiversity Convention, GIZ
International biodiversity policy, biodiversity management, ecosystem services, biodiversity and climate change
1/08 – 5-2010  Programme: Sustainable Rural Development Peru, GTZ (on behalf of ECO-AGEG ARGE)
Natural resource management, adaptation to climate change, environmental finance, Socio-environmental conflicts
1/07 – 12/07  Programme: Sustainable Rural Development Peru, GTZ
Natural resource management, Adaptation to climate change, payments for ecosystem services
9/04-12/06  Regional project: Sustainable Land Use in Andean Watersheds (Peru, Colombia and Ecuador), GTZ
Watershed management, payments for ecosystem services
11/03-8/04  Freelance consultant
Natural resource management

EDUCATION
Since 1/15  Leuphana Universität Lüneburg/ Professional School:
Sustainability Management (MBA)
10/00-03/03  Humboldt-Universität, Berlin:
International Agricultural Development (MSc)
10/99-07/00  Universidad Politécnica Madrid:
Erasmus-exchange programme: Agricultural policy and rural development in the EU
10/97-09/00  Christian-Albrechts-Universität, Kiel:
Agricultural Science
CURRICULUM VITAE
M.SC. ISABEL RENNER

LANGUAGE SKILLS

• English: fluent
• Spanish: fluent
• French: basic
• Portuguese: basic

PUBLICATIONS (selection)


• Kosmus, Marina; Ullrich, Silvia and Renner, Isabel: Integrating Ecosystem Services into Development Planning. A stepwise approach for practitioners based on the TEEB approach. GIZ, Eschborn 2012.


• Probst, Kirsten; Müller, Alexandra and Renner, Isabel: Adaptation and Biodiversity. In: Adaptation to Climate Change with a Focus on Rural Areas and India. GIZ. India 2011.


• León Morales, Fernando; Moncayo, María Cristina; Prem, Ingrid y Renner, Isabel: Compensación por servicios ecosistémicos: Lecciones aprendidas de una experiencia demostrativa. Las microcuencas Mishiquiyacu, Rumiyacu y Almendra de San Martín, Perú. Ministerio del Ambiente. Lima 2010.


• Consejo Nacional del Ambiente: Bases conceptuales y metodológicas para el Ordenamiento Territorial en Perú. CONAM. Lima 2006.


Work experience

March 2014 – now  Advisor, ValuES project, GIZ
Expert advice on ecosystem service approach, governance of natural resources, financial mechanisms for conservation.
Conceptualization, development and implementation of workshops, trainings and other events
Development and implementation of cooperation structures within different partner countries and networks
Coordination of project pilot activities in cooperation with country programs

March 2013 – February 2014  Director European Public Partnership, Conservation International (Europe Office)
Manage Conservation International’s relationship with the German and Norwegian government, guide CI’s policy strategy with these governments
Support to CI Programs internationally, project backstopping, and development of engagement strategies especially with regards to European governments’ priorities
Development of a CI Europe fundraising strategy and workplan including policy engagement in Germany, Norway and the UK

July 2009 – February 2013  Public Funding Liaison, Conservation International
Manage the donor relationship with European governments (mostly Germany, Norway, UK)
Support country programs to maintain and raise new European public and private funds
Provide support in monitoring and reporting on European public funding sources and internal communication
Support the development of Conservation International’s strategy in Europe

May 2007 – June 2009  Project Coordinator for the Advising-Assistance Program of the German Federal Ministry for the Environment
geographic focus on the Russian Federation, Caucasus and Central Asia
Manage ongoing projects including review of progress and financial reports, coordinate disbursements, perform site visits
Prepare tenders on the basis of bilateral government agreements together with specialists and Eastern European government officials and the project’s beneficiaries
Write and edit articles for public relations
Communicate and plan the program’s strategy together with the German Ministry for Environment

October 2006 – March 2007  Freelance at the DNR EU-Coordination Office
Researched and formulated background information on environmentally important EU-Council formations; coordinated environmental groups for lobby activities; managed contacts with officials in European and German administration

June 2006 – October 2006  Intern at GTZ-Office, Quito (Ecuador)
Assisted Head of Component “Valuation of Environmental Services”; developed trust fund structure for community conservation area, initiated structured fundraising-effort for trust fund; formulated project proposals
Education
University

1999 – 2005  Diplom Degree in Landscape Ecology and Nature Conservation at the Ernst-Moritz-Arndt-University, Greifswald, Germany (equivalent of Master’s degree)
Majors: International Nature Conservation and Ecological Development Aid, Sustainable Land Use, Environmental Ethics, Environmental Economics

2001 – 2002  attendance at the University of Vigo, Spain; Erasmus Exchange Program

Skills
Languages

German: native speaker
English: oral and written proficiency
Spanish: Intermediate oral and written proficiency
French: basic knowledge
Russian: beginner

Computer skills  MS Office